NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

CHANNEL VEGETATION

(acre)

CODE 322

DEFINITION

Establishing and maintaining adequate plants on channel banks, berms, spoil, and associated areas.

PURPOSE

To stabilize channel banks and adjacent areas and reduce erosion and sedimentation. To maintain or enhance the quality of the environment, including visual aspects and fish and wildlife habitat.

SCOPE

This standard applies to the vegetation of open channels, streams, or ditches. It applies to Floodwater Diversions (400), Floodways (404), Open Channels (582), Stream Channel Stabilization (584), Streambank Protection (580), and Surface Drainage, Main or Lateral (607-B). It does not apply to Diversions (362), Grassed Waterways or Outlets (412), or Surface Drainage, Field Ditches (607-A).

CONDITIONS WHERE PRACTICE APPLIES

On channel banks, berms, spoil, and associated areas; except grassed waterways, diversions and areas with protective linings, those covered with water for an extended period, or in areas where conditions will not support adequate vegetation.

PLANNING CONSIDERATIONS

Evaluate slopes and soil material, time of year for proper establishment of vegetation, necessity for irrigation, visual aspects, fish and wildlife, fire hazards and special needs when construction is done from one side. Other considerations include:

1. Protection of channel vegetation from sediment deposits resulting from wind and water erosion.

2. Provisions for safety and protection of human life and property in all aspects of designs, application, and maintenance.

3. Methods by which endangered and threatened plants and nationally recognized natural vegetated areas will be identified and protected.

4. Requirements for overseeding or planting woody or herbaceous vegetation on the unexcavated side when construction is done from one side.

5. Identification of desirable trees and other vegetation and means for their preservation.

6. Special techniques for establishing and maintaining vegetation near inlets, outlets, or other appurtenances.

SPECIFICATIONS GUIDE

An adequate vegetative cover stabilizes the channel area and provides for temporary or permanent protection or both.

Side slopes. Specify side slopes that permit establishing and maintaining desired vegetation and that have been effective in the past.

In urban and recreation areas, flatter side slopes may be required to provide for public safety and enhancement of visual resources.

Species selection. Specify species that are suited to the soil, climate, and exposure. They must provide a lasting cover to protect the channel area and to maintain the channel design capacity. Use special purpose plantings outside the channel for wildlife, recreation, or visual resources.

Seedbed preparation. Specify seedbed preparation, fill rills and gullies, and remove stones and debris.

Fertilizer and soil amendments. Specify fertilizers and soil amendments, including analyses, rate, method of application, and requirements for top-dressing.

Planting. Specify dates, rates, and methods of seeding, sprigging, sodding, or planting.

Mulching. Specify types and rates of mulch materials and the methods of anchoring.

Irrigation. Specify irrigation if it is needed for establishing vegetation.

Controlled access. Control access to channels, as needed by fencing or by other means to protect slopes and vegetation from damage.

Maintenance. Provide for:

1. Periodic inspection and evaluation of channel vegetation to determine maintenance needs.

2. Management of vegetation growth, as applicable, by mowing controlled grazing, approved chemicals, or other means to maintain the desired cover.

3. Reseeding or replanting, along with the use of fertilizers and/or soil amendments and irrigation, as needed.

4. Repair of appurtenances and fences.

PLANNING CONSIDERATIONS FOR WATER QUANTITY AND QUALITY

Quantity

1. Potential runoff from bare soil during construction.

2. Effects on the water budget components, especially on volumes and rates of runoff.

Quality

1. Effects of nutrients or pesticides in runoff during establishment of vegetation.

2. Effects of streambank erosion before vegetative establishment.